

In The Claims

Cancel claims 22, 23, and 37-42 without prejudice.

Kindly amend claims 2, 4, 7, 17, 20, 21, 25, 33, 34, 49, 50, 54, 64, and 65 as follows:

- C²
1. (cancelled)
 2. (Currently amended) A gene expression and delivery system according to claim 21 wherein the replicon of Kunjin virus origin includes the nucleotide sequence for a Kunjin virus 5' untranslated region (UTR), at least a portion of the 5' coding region for Kunjin virus core protein, the nucleotide sequence coding for the Kunjin virus nonstructural proteins, and part or all of the 3'-terminal sequence of a Kunjin virus 3'UTR, required for self-replication of Kunjin virus genomic material, ~~which vector is adapted to receive at least a nucleotide sequence without disrupting its replication capabilities.~~
 3. (previously amended) A gene expression and delivery system according to claim 21 wherein the replicon contains a sufficient amount of Kunjin virus 5' UTR and a sufficient amount of 5' Kunjin virus coding region for core protein required for RNA replication.
 4. (Currently amended) A gene expression and delivery system according to claim 21 wherein the replicon contains a Kunjin virus 5' UTR and at least about between 60 and 80 nucleotides from the 5' coding region for flavivirus ~~Kunjin virus~~ core protein.
 5. (previously amended) A gene expression and delivery system according to claim 21 wherein the replicon contains the Kunjin virus 5' UTR and at least 60 nucleotides of the Kunjin virus 5' core protein coding region.
 6. (cancelled)

7. (Currently amended) A gene expression and delivery system according to 21 wherein the replicon is adapted to receive said at least a one nucleotide sequence at any point in the replicon that does not effect processing of Kunjin virus proteins and RNA replication.
8. (original) A gene expression and delivery system according to claim 7 wherein the nucleotide sequence is inserted into the 3' UTR of the replicon.
- C 9. (original) A gene expression and delivery system according to claim 8 wherein the nucleotide sequence that is inserted into the 3' UTR of the replicon is preceded by an IRES sequence.
- 10-14. (cancelled)
15. (previously amended) A gene expression and delivery system according to 21 wherein the replicon includes after the 3' terminal sequence of a Kunjin virus 3'UTR a sequence cassette containing antigenomic ribozyme of the hepatitis delta virus and SV 40 polyadenylation signal, required for production of vector RNA with precise 3'terminus possessing high replication efficiency.
16. (previously amended) A gene expression and delivery system according to claim 21 wherein the replicon is an RNA based vector.
17. (Currently amended) A gene expression and delivery system according to claim 16 wherein the replicon is an RNA based vector, which is capable of producing replicon RNA in *in vitro* transcription reactions by bacteriophage DNA-dependent RNA polymerases from ~~plasmid DNAs incorporating corresponding~~ a plasmid DNA that comprises one or more bacteriophage promoters preceding the replicon sequence.

18. (previously amended) A gene expression and delivery system according to claim 21 wherein the replicon is a DNA based vector.
19. (previously amended) A gene expression and delivery system according to claim 21 wherein the replicon is a DNA based vector, which is capable of producing replicon RNA in cells by cellular DNA-dependent RNA polymerase from plasmid DNA incorporating mammalian expression promoters preceding the replicon sequence.
20. (Currently amended) A gene expression and delivery system according to claim 21 wherein the replicon is ~~derived~~ originates from a single Kunjin virus ~~species~~.
21. (Currently amended) A gene expression and delivery system comprising:
- (a) a replicon of ~~flavivirus~~ Kunjin virus origin as a first vector, which is adapted to receive at least a one nucleotide sequence without disrupting its replication capabilities and which is unable to express at least part or all of a structural protein(s) region and/or a protein(s) or part thereof required for packaging of a ~~flavivirus~~ Kunjin virus genome into a virus-like particle; and
 - (b) at least a second vector that is capable of expressing ~~flavivirus~~ Kunjin virus structural protein(s) ~~and/or any other proteins required~~ for packaging of the replicon into infectious ~~flavivirus~~ Kunjin virus-like particles, ~~wherein the replicon is derived from Kunjin virus.~~
22. (Cancelled)
23. (Cancelled)
24. (previously amended) A gene expression and delivery system according to claim 21 wherein the second vector is heterologous in origin to the origin of the replicon.

25. (Currently amended) A gene expression system according to claim 21 wherein the second vector is ~~derived from an~~ of alphavirus origin.

26-32 (cancelled)

33. (Currently amended) A gene expression system according to claim 21 wherein the second vector is ~~derived from~~ of Semliki Forest Virus origin.

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34. (Currently amended) A gene expression system according to claim 21 wherein the second vector is ~~derived from~~ of Sindbis virus origin.

35. (previously amended) A gene expression system according to claim 21 wherein the replicon is adapted to include part or all of the following: at least, about the first 150 nucleotides of a Kunjin virus genome; at least about the last 60 nucleotides of E protein; substantially all of the nonstructural region; and part or all of the 3'UTR.

36. (previously amended) A gene expression system according to claim 21 wherein the replicon is adapted to include part or all of the following: the first 157 nucleotides of the Kunjin virus genome, the last 66 nucleotides of E protein, the entire nonstructural region, and all of the 3'UTR.

37-48. (cancelled)

49. (Currently amended) A DNA based replicon vector according to claim 65 wherein the complementary DNA sequence ~~of the nucleotide sequence~~ includes a Kunjin virus 5' untranslated region (UTR), at least a portion of the 5' coding region for Kunjin virus core protein, the nucleotide sequence coding for the Kunjin virus non-structural proteins, and part or all of the 3'-terminal sequence of a Kunjin virus 3'UTR, required

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for self-replication of Kunjin virus genomic material, ~~which vector is adapted to receive at least a nucleotide sequence without disrupting its replication capabilities.~~

50. (Currently amended) A DNA based replicon vector according to claim 65 ~~wherein the~~
comprising a eucaryotic expression promoter is a cytomegalovirus early enhancer promoter region.
51. (previously amended) A DNA based replicon vector according to claim 65 wherein the replicon includes at its 3' end an antigenomic ribozyme of hepatitis delta virus and simian virus 40 polyadenylation signal cassette, required for production of efficiently replicating replicon RNA with the precise 3' terminus.
52. (previously amended) A DNA based replicon vector according to claim 65 wherein the replicon contains a sufficient amount of the complementary DNA sequence of the Kunjin virus 5' UTR and the 5' Kunjin virus coding region for core protein required for RNA replication.
53. (previously amended) A DNA based replicon vector according to claim 65 wherein the replicon contains the complementary DNA sequence of a Kunjin virus 5' UTR and at least about between 60 and 80 nucleotides from the 5' coding region for Kunjin virus core protein.
54. (Currently amended) A DNA based replicon vector according to claim 65 wherein the replicon contains the complementary DNA sequence of the Kunjin virus 5' UTR and at least 60 nucleotides of the Kunjin virus 5' core protein coding region.

55. (previously amended) A DNA based replicon vector according to claim 65 wherein the replicon includes the complementary DNA sequence of the nucleotide sequence for the Kunjin virus 5'UTR, at least a portion of the 5' nucleotide coding region for Kunjin virus core protein, the nucleotide coding region for Kunjin virus nonstructural proteins, a sufficient amount of the 3'-terminal region of the Kunjin virus 3'UTR required for self-replication of Kunjin virus genomic material wherein (i) the vector is adapted to receive at least a nucleotide sequence without disrupting the replication capabilities of the vector, (ii) the nucleotide sequence is inserted into the vector in a manner which deactivates expression of at least a gene that would otherwise code for a Kunjin virus structural protein and (iii) the inserted nucleotide sequence does not encode for the structural protein sequence that it deactivates.
56. (previously amended) A DNA based replicon vector according to claim 65 wherein the replicon is adapted to receive at least a nucleotide sequence at any point in the replicon that does not effect processing of Kunjin virus proteins and RNA replication.
57. (previously amended) A DNA based replicon vector according to claim 65 wherein the nucleotide sequence is inserted into the 3' UTR of the replicon.
58. (previously amended) A DNA based replicon vector according to claim 65 wherein the nucleotide sequence that is inserted into the 3' UTR of the replicon is preceded by an IRES sequence.
59. (previously amended) A DNA based replicon vector according to claim 65 wherein the nucleotide sequence is inserted within a structural gene.

60. (previously amended) A DNA based replicon vector according to claim 65 wherein the nucleotide sequence is inserted in place of at least a deleted structural gene.
61. (previously amended) A DNA based replicon vector according to claim 65 wherein the nucleotide sequence that is inserted in place of deleted structural proteins of the replicon is followed by a termination codon and a IRES sequence.
62. (previously amended) A DNA based replicon vector according to claim 65 wherein the inserted nucleotide sequence possesses at its 3' end a 2A autoprotease sequence of foot and mouth disease virus.
63. (previously amended) A DNA based replicon vector according to claim 65 wherein the inserted nucleotide sequence possesses at its 5' end a mouse ubiquitin sequence.
64. (Currently amended) A DNA based replicon vector according to claim 65 wherein the replicon ~~is derived~~ originates from a single Kunjin virus ~~species~~.
65. (Currently amended) A DNA based replicon vector of Kunjin virus origin, wherein the vector comprises:
- (a) a complementary DNA sequence that is adapted to receive at least a one nucleotide sequence without disrupting its replication capabilities and which is unable to express at least part or all of a structural protein(s) region and or a protein(s) or part thereof required for packaging of a Kunjin virus genome into a virus-like particle;
 - (b) a mammalian expression promoter 5' to the complementary DNA sequence of ~~Kunjin virus origin~~ recited in (a); and

- (c) at least a ~~second~~ one other nucleotide sequence capable of terminating transcription of replicon RNA with a precise 3' terminus; and wherein the promoter and the ~~second~~ one other nucleotide sequence are capable of promoting transcription and terminating same, of Kunjin virus RNA within the nucleus of a transfected cell.

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